

Stibnite Gold Project
Environmental Impact Statement

Site Wide Water Balance
Dated April 20, 2018

US EPA Region 10 Review Comments

Note: The Disposition and Response columns will be filled out by AECOM after addressing each Comment

Number	Page # or Global	Section	Paragraph	Comment	Commenter Initials	Disposition A/M/O	Response & Responder's Initials
	General			<p>The model is conceptual based on estimates (by Midas) of inflow/outflow values at planned facility components based on average precip data. Overall, for the purposes of supporting the other models, the approach and estimates appear reasonable and comprehensive (i.e. covers all avenues of inflow and outflows of water across the Site).</p> <p>Includes many assumptions (which I believe is necessary), such as:</p> <ul style="list-style-type: none">- volumes constant over life of the project- all precip that falls on top DRSFs will infiltrate. Along the sides, precip will both run off and infiltrate.- Infiltrated water through DRSFs will recharge groundwater and a portion will report as toe seepage.- Removal of groundwater from pits by dewatering is assumed to be highly effective, therefore groundwater seepage into pits assumed to be minimal and is not estimated.- Seepage into groundwater will be pumped from pit bottoms (thus assuming 100% capture and not accounting for any loss to groundwater not captured).- Precip (all) that infiltrates DRSFs exit as toe seepage the same month with no lag time. There is no basis for no estimating lag time.- Assumes that the precip will not fall outside the 14-year below/above average scenarios.- Toe seepage for the West End DRSF includes only infiltration through the facility. <p>One question related to the modeling runs is that they are only based on averaged precip values. Shouldn't a simulation using high/extreme precip events be considered?</p>	TM		
	Section 2.3.3 Contact Water			The document states that the DRSFs will be constructed on exposed bedrock and little alluvium. The model assumes an even split of infiltrated water into groundwater and toe seepage. Is there any basis of this assumption (i.e. permeability of alluvium and/or degree of			

Number	Page # or Global	Section	Paragraph	Comment	Commenter Initials	Disposition A/M/O	Response & Responder's Initials
				fracturing/competence of bedrock)? Also, it may be beneficial to model scenarios where less water infiltrates and is released at the toe.			
	General			The water balance should include water management during the operations period including surface water distribution, storage, and use within the mine site. This would include water supply and treatment (gpm) within the project based on precipitation conditions during mine construction and operations	LAH		
		2.3.3		Please clarify what is meant by “disposed through forced evaporation”	TM		
		2-6		Discharges from the site cannot exceed the volume of net precipitation on the treatment facility (TSF) and mine drainage. If the TSF is not going to have a mine drainage input, then only that volume of net precipitation falling on the site would be allowed.	CG		
		2-8		Could the rapid infiltration basins be considered underground injection wells? How close in time and distance is the hydrologic connection between the basins and Meadow Creek?	CG		
		4-1		It would seem that evapotranspiration would be determined by land area and not necessarily by the amount of precipitation	CG		
		7-1		Does “combining the results of the 14 realizations” taken into consideration more than the average, below average, and above average? It would seem that combinations of these conditions could occur during one year like a dry summer followed by a wet fall . . .	CG		
		Appendix A		None of the conceptual figures show/mention any underground workings while the body of the report does in Sections 2.2.1, 2.3.3 and 2.3.5	CG		

[illegible]

[illegible]

[illegible]

Number	Page # or Global	Section	Paragraph	Comment	Commenter Initials	Disposition A/M/O	Response & Responder's Initials